

VERTICAL PROFILE DISPLAY WITH ARBITRARY PLANE

ABSTRACT OF THE DISCLOSURE

A system for allowing pilots to quickly determine weather hazard-free flight paths and weather hazards that exist along the aircraft flight plan. The system includes a memory, a processor, and a display device. The memory stores weather radar return information in a three-dimensional buffer. The processor is coupled to the memory. The processor receives a display distance value signal, retrieves weather radar return information stored in a plane of voxels in the three-dimensional buffer based on the selected display distance value and aircraft position information, and generates an image based on the retrieved weather radar return information. The display device is coupled to the processor for displaying the generated image.